WHAT IS CLAIMED IS:

1. A polypeptide comprising human papillomavirus E6 and E7 polypeptides, wherein the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of SEQ ID NO: 14 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 63 or 106 of SEQ ID NO: 13.

2. The polypeptide of claim 1 wherein the mutated amino acids are mutated to glycine.

3. The polypeptide of claim 1 wherein the E7 polypeptide precedes the E6 polypeptide.

4. The polypeptide of claim 2 wherein the E7 polypeptide precedes the E6 polypeptide.

5. An isolated nucleic acid encoding the polypeptide of claim 1.

6. The nucleic acid of claim 5 wherein the nucleotide sequence of E7 precedes the nucleotide sequence of E6.

7. An expression vector comprising the nucleic acid sequence of claim 5 under the control of an expression control sequence.

8. A host cell comprising the nucleic acid of claim 5.

9. A host cell which expresses the polypeptide of claim 1.

10. A host cell comprising the expression vector of claim 7.

11. An immunogenic composition comprising:

(a) the polypeptide of claim 1; and

(b) a pharmaceutically acceptable carrier.

12. The immunogenic composition of claim 11 further comprising adjuvant.

13. An immunogenic composition comprising the nucleic acid of claim 5.

14. A recombinant virus comprising the nucleic acid of claim 5.

15. The recombinant virus of claim 14, wherein the virus is a modified Venezuelan equine encephalitis virus.

16. A method for producing an immune response in an individual, which method comprises administering to the individual the immunogenic composition of claim 11 in an amount sufficient to produce the immune response.

17. A method of treating cervical cancer, which method comprises administering to a patient diagnosed with cervical cancer the immunogenic composition according to claim 11 in an amount sufficient to produce a protective immune response.

18. A method of preventing cervical cancer, which method comprises administering to an individual the immunogenic composition of claim 11 in an amount sufficient to produce a protective immune response.

19. A method of preventing cervical cancer, which method comprises administering to an individual the expression vector of claim 7 in an amount sufficient to produce a protective immune response.

20. A method of treating cervical cancer, which method comprises administering to a patient diagnosed with cervical cancer the expression vector of claim 7 in an amount sufficient to produce a protective immune response.

21. The isolated polypeptide of claim 1 wherein the E7 polypeptide has mutations in at least two of amino acids corresponding to amino acids 24, 26 and 91 of SEQ ID NO: 14 and the E6 polypeptide has one or more mutations at amino acids corresponding to amino acids 63 and 106 of SEQ ID NO: 13.

22. An isolated polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 9, or SEQ ID NO: 11

23. An isolated nucleic acid encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 9 or SEQ ID NO: 11.

24. The isolated nucleic acid of claim 23 having the nucleotide sequence as set forth in SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 10 or SEQ ID NO: 12.

25. An expression vector comprising the nucleic acid sequence of claim 23 under the control of an expression control sequence.

26. An expression vector comprising the nucleic acid sequence of claim 24 under the control of an expression control sequence.